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**Via Federal Express & Email**  
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Secretary Michael S. Regan  
Department of Environmental Quality  
217 West Jones Street  
Raleigh, North Carolina 27603

Re: GenX in the Cape Fear River

Dear Secretary Regan:

We are environmental counsel for the Cape Fear Public Utility Authority ("CFPUA").

We and the CFPUA have reviewed the 2006, 2011, and 2016 Chemours and DuPont NPDES discharge permit applications provided to us by DEQ and have not found in those applications notification that GenX is among the pollutants being discharged to the Cape Fear River.

We and the CFPUA were surprised by a contrary statement attributed to Department of Environmental Quality ("DEQ") personnel by the Wilmington Star News in a June 29, 2017 article ("Purported DEQ Statement"):

State regulators said Chemours informed them in its most recent discharge permit application and "all previous applications" that it was releasing GenX and other related substances from the Fayetteville Works plant into the Cape Fear River, a process that has occurred since 1980.

Vaughn Hagerly, *Did Chemours tell NC it was discharging GenX?*, Wilmington Star News, June 29, 2017 (available at <http://www.starnewsonline.com/news/20170629/did-chemours-tell-nc-it-was-discharging-genx>). The Star News indicated the basis for the Purported DEQ Statement was the following excerpt from a section of the pending 2016 NPDES Permit Renewal Application:

The HFPO monomer and the Vinyl Ether monomers are used to manufacture various fluorochemical products such as Chemours Teflon. Wastewater generated from this manufacturing facility is discharged to the Chemours' wastewater treatment plant.

We do not believe that the excerpt constitutes notice to DEQ or the public that Chemours is discharging GenX into the Cape Fear River, particularly in light of other affirmative representations in the permit applications.

### **The Quoted 2016 Permit Application Excerpt Does Not Give Notice of the Discharge of GenX.**

The quoted 2016 application excerpt is part of the applicant's discussion of the Fluoromonomers/Nafion® Membrane Manufacturing Area (the "FNNM Area"). We do not understand how the quoted excerpt could put DEQ or the public on notice that Chemours was releasing GenX into the Cape Fear River.

First, the application excerpt does not identify *any* wastewater constituents. The excerpt fails to identify even the raw materials being used, providing only the barest description of the final products manufactured in the FNNM area—which are mostly identified only by brand name. There is no identification of the constituents of the wastewater.

Second, the general reference to the "HFPO monomer" and the "Vinyl Ether monomers" does nothing to identify the involvement of GenX. Neither HFPO nor Vinyl Ether monomers are GenX compounds, as is evident from the Netherlands study previously provided to DEQ, which shows the molecular structure of GenX compounds. First, HFPO is a specific chemical and not one of the GenX compounds. Second, by definition GenX compounds do not constitute vinyl ethers as they lack the necessary  $\text{CH}_2=\text{CH}-\text{O}-\text{R}$  chemical structure, or the perfluorinated equivalent of  $\text{CF}_2=\text{CF}-\text{O}-\text{R}$ .

Likewise, the description of FNNM Area products loosely refers to their use in the manufacture of "various fluorochemical products such as Chemours Teflon®," but the general reference to the manufacture of other products at other facilities provides no notice that GenX is a constituent of process wastewater from the FNNM Area.

Thus, the reported basis for the Purported DEQ Statement – an excerpt from the 2016 permit application – does not provide any support for a conclusion that Chemours informed DEQ that Chemours was discharging GenX into the Cape Fear River.

### **Statements in Permit Applications**

The Purported DEQ Statement regarding previous applications also seems misplaced in light of the representations made by DuPont and Chemours in the permit applications.

**2006.** DuPont's May 1, 2006 NPDES Permit Renewal Application Supplemental Information states the following about APFO manufacturing at the Fayetteville Works: (i) it had

been manufacturing APFO (the ammonium salt of PFOA) since November 2002; (ii) “none of the produced APFO is used at the Fayetteville Works site”; and (iii) “[a]ll wastewater generated from this manufacturing facility is collected and shipped off-site for disposal. No process wastewater from this manufacturing facility is discharged to the site’s biological WWTP or to the Cape Fear River.” As we understand the statement: APFO is manufactured on-site without APFO process wastewater going to the WWTP or the Cape Fear River *and* the APFO is not used anywhere else on-site. We cannot discern how these statements would put DEQ or the public on notice that the Fayetteville Works was causing APFO to be discharged to the Cape Fear River.

**2011.** DuPont’s April 29, 2011 Permit Renewal Application includes statements about an unidentified polymer processing aid (“PPA”), which mirror the DuPont statements about APFO. As with the prior statements about APFO, the company said about this unidentified PPA: (i) the facility was started in November 2002; (ii) “none of the produced processing aids are used at the Fayetteville Works site”; and (iii) “[a]ll process wastewater generated from this manufacturing facility is collected and shipped off-site for disposal. No process wastewater from this manufacturing facility is discharged to the site’s biological WWTP or to the Cape Fear River.” The PPA was not identified.<sup>1</sup> But, even if the PPA had been identified as APFO or GenX or both, we cannot discern how these statements would put DEQ or the public on notice that the Fayetteville Works is causing APFO or GenX to be discharged to the Cape Fear River.

**2016.** Most recently, Chemours included in its April 27, 2016 NPDES Permit Renewal Application statements identical to those in its 2011 application as quoted above.

The DuPont and Chemours statements in 2006, 2011, and 2016 also appear to be echoed in notes of DEQ’s Mr. Belnick, taken at meetings with DuPont in 2010 and again in 2015, which indicate that GenX waste streams are captured and incinerated off-site.<sup>2</sup> We also note that the Final RCRA Facility Investigation (RFI) Report, dated August 2014 and submitted to DEQ by DuPont under the Hazardous and Solid Waste Corrective Action Program, likewise represents that APFO was manufactured at the facility but was “never used in any of the other manufacturing facilities at the Site.” RFI at 3.

In short, the records cited as supporting the Purported DEQ Statement appear to us to contradict it. The records do not appear to us to support a conclusion that “Chemours informed them in its most recent discharge permit application and ‘all previous applications’ that it was releasing GenX and other related substances from the Fayetteville Works plant into the Cape Fear River.” If DEQ’s position has been misstated or misreported or there are other documents not provided in response to the CFPUA’s public records request that provide further clarification,

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<sup>1</sup> The unidentified PPA may have been both APFO and GenX because: (i) the PPA statements replace the prior application’s statements about the manufacture of APFO ; (ii) APFO was still being manufactured at the time, but the company was transitioning to GenX around this time; (iii) DuPont’s GenX fact sheet describes GenX as a processing aid; and (iv) during its June 12, 2107 meeting with DEQ personnel, Chemours apparently characterized GenX and APFO as processing aids manufactured in the PPA section of the Fayetteville Works site (see handwritten notes from DEQ file).

<sup>2</sup> Mr. Belnick’s notes were the subject of our prior letter to DEQ, dated June 23, 2017.


please advise us. If DEQ's position has been accurately reported, the CFPUA requests that position be reversed.

As we have reviewed the records, we have been mindful of the N.C. Drinking Water Act and its implementation in 15A NCAC 18C.1209: "No untreated domestic sewage or *industrial waste by-products* shall be discharged into any public water supply reservoir or stream classified as WS-II, WS-III, WS-IV, or WS-V." Given Chemours' position that its GenX discharges occurred only as "industrial byproducts," we doubt that DEQ in prior years would have knowingly allowed the discharge of these "byproducts" to have occurred.

In any event, much has been revealed in recent weeks that is not included in the Chemours and DuPont NPDES permit applications. CFPUA requests that the new information be brought to bear and that the current NPDES permit under consideration expressly prohibit the discharge of GenX, C8, and perfluorinated byproducts into the Cape Fear River.

Sincerely,

  
George W. House

  
Joseph Ponzi  
Attorneys for CFPUA

cc: Bill Lane